

Introduction to PubMed, PMC, and NCBI Accounts for Researchers

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National Library of Medicine
National Center for Biotechnology Information

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Goals for this workshop

In this workshop you will learn how to:

- Search PubMed to find abstracts on biomedical topics
- Use basic database structure to design effective search queries
- Find abstracts with links to full text in PubMed Central or to the publishers' site
- Create an NCBI account
- Save queries and set up weekly or monthly emailed search results
- Organize results using your NCBI account
- Export citations from PubMed for use by citation managers, such as Endnote or Zotero.



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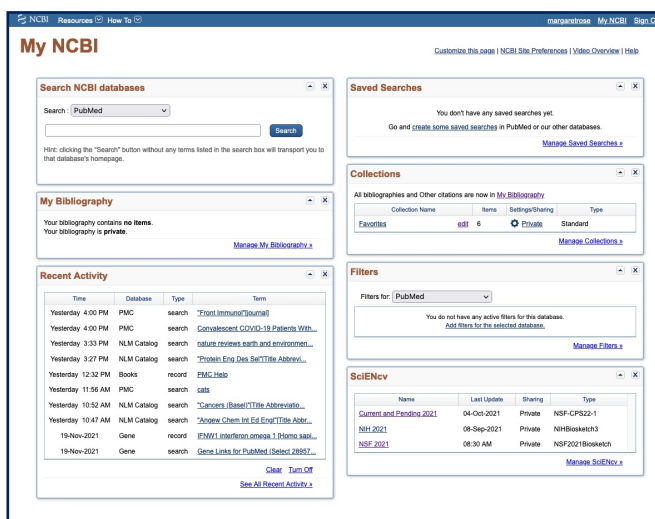
NCBI Workshop



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NCBI Account: A solution for organizing your search results

- Create Collections to organize your search results by topic
- Save your favorite searches to use again or receive alerts for new records for your topic

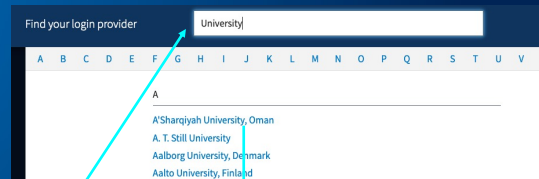
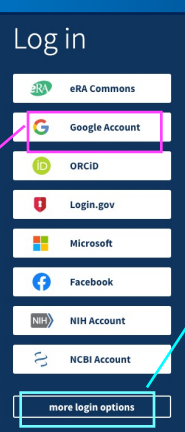
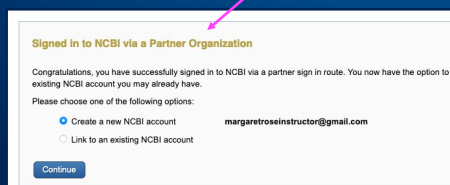


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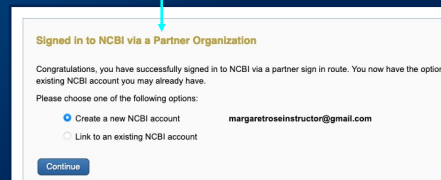
How to Create an Account University-linked Account

Google Account

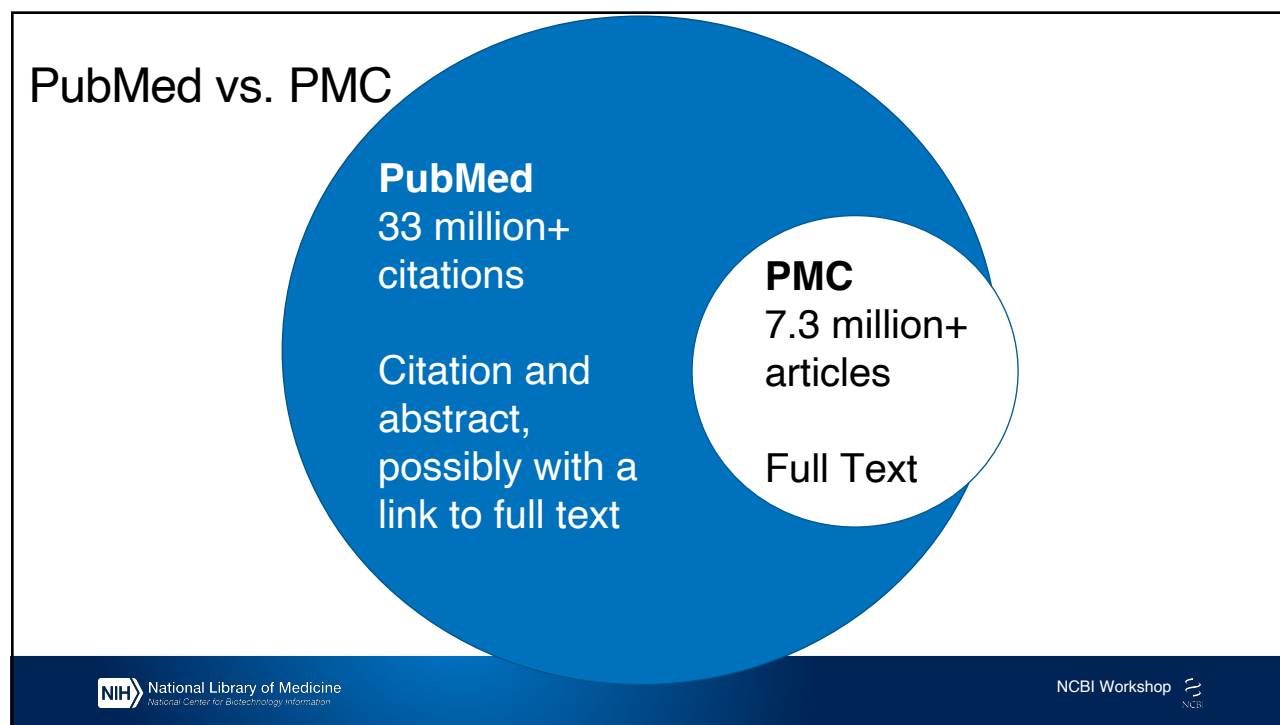
Enter Google Credentials



Enter University login credentials



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What is in PubMed?

- Mostly abstracts from peer-reviewed journal articles, but also includes other types of publications.
- Topics related to human health and healthcare practices, but also a much wider scientific spectrum.
- PubMed sometimes includes a link to the full text, which may or may not be open-access
- Only looking for free full-text? Use the free full-text filter in PubMed

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Getting Started Searching in PubMed

- ★ Think about your *why* and your *what*
- ★ Start off with one term and build from there
- ★ Use the sidebar filters to narrow your results
- ★ Use all parts of the PubMed record
- ★ Add citations as you go to your collections or export to citation manager

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Determining Your Why and What

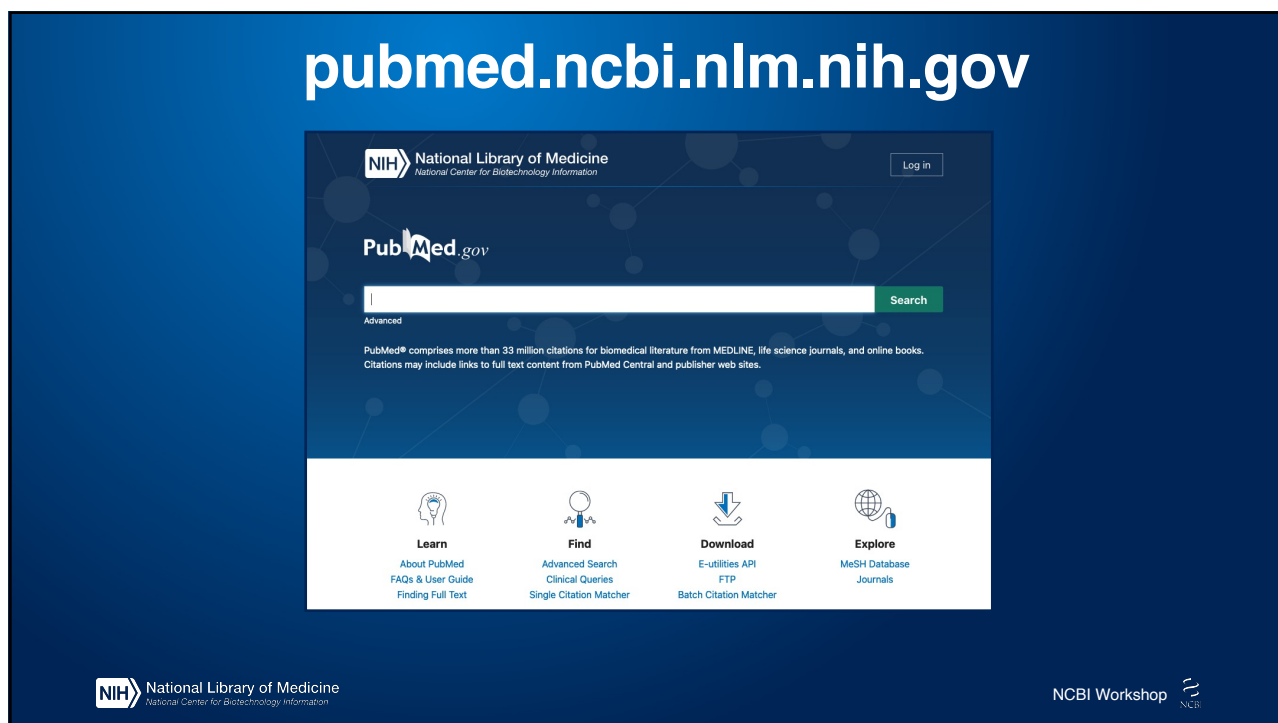
Why?

- Dad has gallbladder issues
- Wants to learn about whether going vegan or vegetarian might help his gallbladder
- Read full text and bring it to talk with his doctor

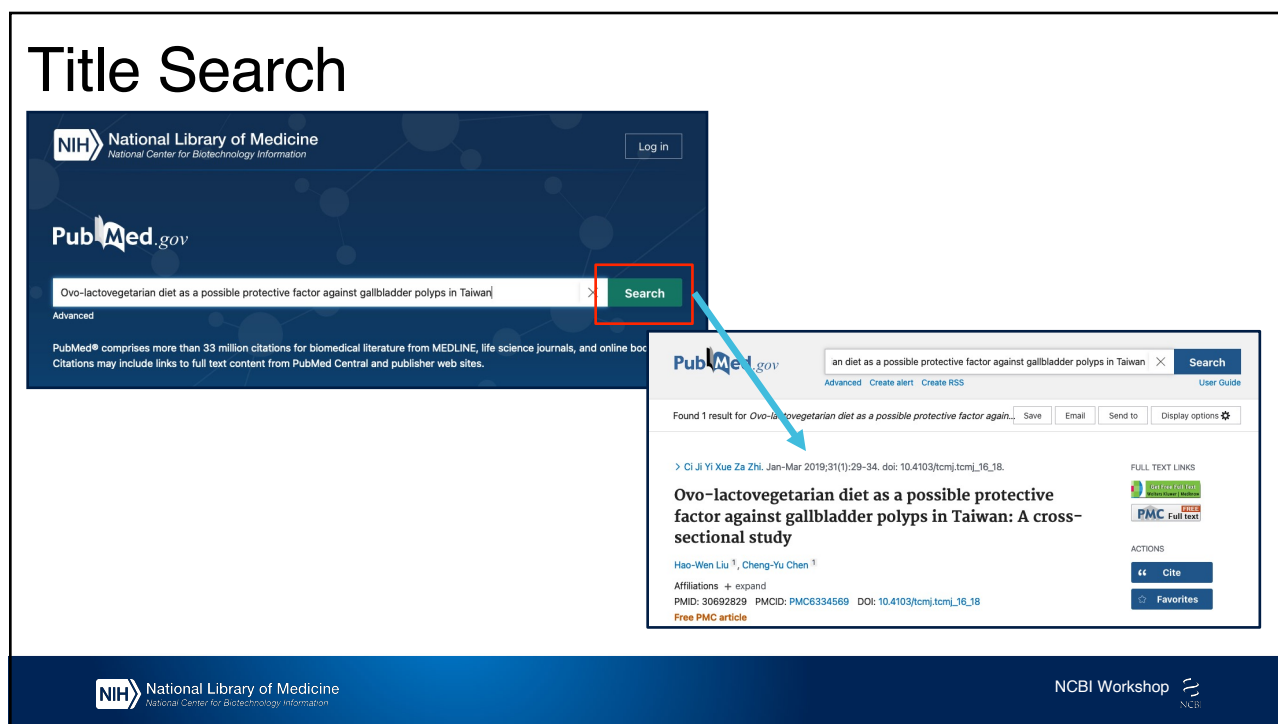
What?

- Free full text articles
- Topics: gallbladder, vegan, vegetarian

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Using the PubMed record

The screenshot shows a PubMed record for a study. The title is "Ovo-lactovegetarian diet as a possible protective factor against gallbladder polyps in Taiwan: A cross-sectional study". The authors are Hao-Wen Liu and Cheng-Yu Chen. The abstract states that gallbladder polyps (GBPs) are an increasingly common incidental finding and that a poor prognosis is expected in patients with gallbladder cancer. The study included 11,717 individuals who received a health checkup at Taipei Tzu Chi Hospital. The results show that the prevalence of GBPs was significantly less common in the vegetarian groups compared to the omnivore group. The conclusion is that the study findings showed a strong negative association between an ovo-lacto vegetarian diet and GBP occurrence.

Reference List for this article

Links to data in other NCBI databases

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Create a Collection

The screenshot shows the 'Send to' menu in PubMed. The menu options are Clipboard, My Bibliography, Collections, and Citation manager. The 'Collections' option is highlighted with a red box.

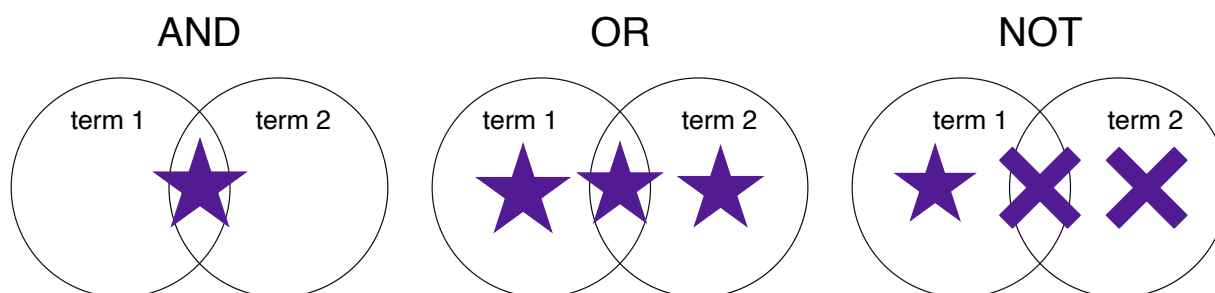
The screenshot shows the 'Add to Collections' dialog box. It has two radio buttons: 'Create a new collection' (selected) and 'Add to an existing collection'. There is a text input field for 'Name your collection:'. At the bottom, there are 'Add' and 'Cancel' buttons. The 'Add' button is highlighted with a red box.

New items were added to your collection. [Edit your collection.](#)

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Putting Terms Together

PubMed and other databases use “Boolean terms” to put terms together in a search



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Using Parentheses with Multiple Terms

eczema hand or foot



(eczema AND hand) OR foot

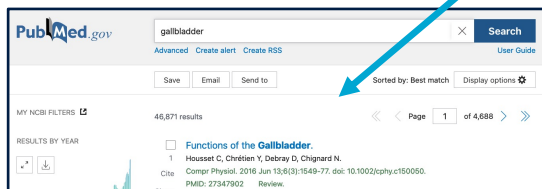
eczema (hand or foot)



(eczema AND hand) OR (eczema AND foot)

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Searching PubMed

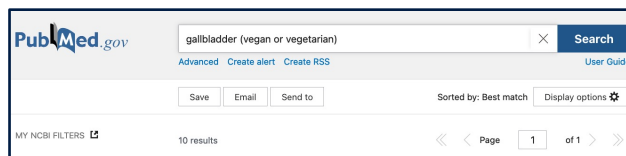


Search 1

Search 2

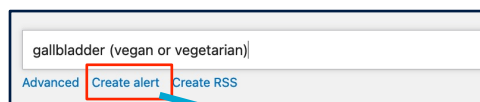


Search 3



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Create an Alert



Your saved search

* Name of saved search:

* Search terms: [Test search terms](#)

Would you like email updates of new search results?

☒ Yes ☐ No

Email: [\(change\)](#)

Frequency:

Which day?

Report format:

Send at most:

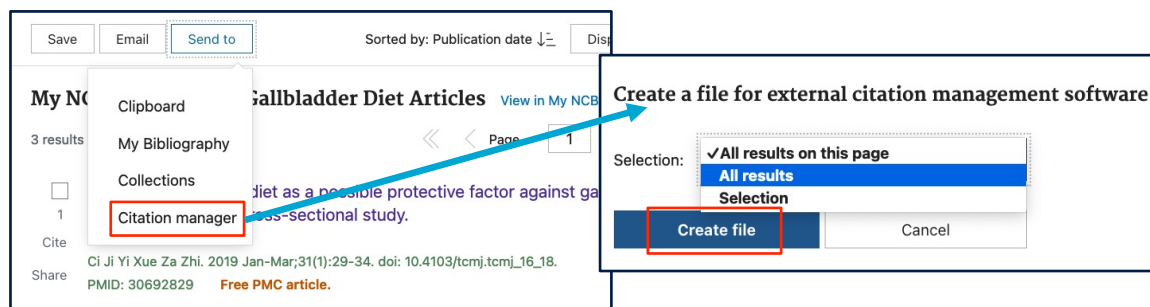
☐ Send even when there aren't any new results

Optional text in email:



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Export Collection to Citation Manager



Transferable Skills

- Defining your topic and planning your search is always helpful
- Most academic databases support the use of Booleans
- Check the database user guide or see if they have on-demand help if you want more information

Final Search

Example: eczema treatment with article type filter

OR

Create a search in PubMed using one element
from each category:

Terms	Sidebar Filter
Two Terms (AND)	Text Availability
Two Terms (OR)	Article Type

**Remember to raise
your hand when
you are finished!**

Further Questions:

General Questions:

- Reach out to your subject librarian, or reference librarian at your institution

PubMed Questions:

- On-demand online training for PubMed, including “Quick Tours for Everyone” - <https://learn.nlm.nih.gov/documentation/training-packets/T0042010P/>
- Write in to the NLM help desk (<https://support.nlm.nih.gov/>)